CLAIMS

What is claimed and desired to be secured by Letters Patent is as follows:

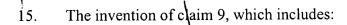
- 1. A sleeve for a length of flexible duct, which comprises:
 - a) first and second ends;
 - b) a passage extending between and open at said ends, said passage selectively receiving the length of flexible duct;
 - a frame generally conforming to the exterior shape of the flexible duct and including first and second frame sections; and
 - d) a frame fastener for securing said first and second frame sections together with the length of flexible duct located in said passage.
- 2. The invention of claim 1 wherein said frame has a longitudinal axis extending between said sleeve ends and a curved configuration curving through an angle in the range of approximately 15 degrees to 180 degrees.
- 3. The invention of claim 2 wherein said sleeve ends lie in respective planes generally perpendicular to said sleeve axis.
- 4. The invention of claim 2 wherein said frame includes inner and outer radius arcs extending between said sleeve assembly ends.



- 5. The invention of claim 4 wherein said frame sections are joined together along at least one of said radius arcs.
- 6. The invention of claim 5 wherein said sections are joined together along both of said radius arcs.
- 7. The invention of claim 4 wherein said radius arcs are generally parallel to said longitudinal axis.
- 8. The invention of claim 3 wherein:
 - a) said frame includes first and second end rings located at said sleeve first and second ends respectively and an intermediate ring located intermediate said first and second end rings; and
 - b) a plurality of longitudinal members extending between and connecting said rings, said longitudinal members extending in generally parallel relation with respect to said longitudinal axis.
- 9. The invention of claim 8 wherein each said ring comprises a pair of ribs, each said rib being located in a respective frame section.

- 10. The invention of claim 8, which includes:
 - a) an inner radius arc longitudinal member located along said inner radius arc and an outer radius arc longitudinal member located along said outer radius arc.
- 11. The invention of claim 10, which includes:
 - a) a pair of side longitudinal members each located at a respective side of said sleeve and each being part of a respective frame section.
- 12. The invention of claim wherein said frame fastener includes:
 - a) a tab with first and second tab halves each mounted on a respective frame section; and
 - b) a coupling selectively receiving said tab halves with said fastener assembly in a closed configuration thereof.
- 13. The invention of claim? wherein each said frame section includes a solid, continuous exterior surface.
- 14. The invention of claim 11 wherein each said frame section includes a pair of side edges and a pair of side longitudinal members located adjacent thereto, said frame sections being fastened together along respective adjacent side edges.





- a) a plurality of loops each mounted on a respective rib of a respective end ring; and
- b) a pair of ties each encircling a respective end ring, said ties being received in said loops.
- 16. The invention of claim 1, which includes:

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- a) said frame comprising plastic;
- b) said frame fastener comprising first and second notched latch members each mounted on a respective frame section; and
- c) said frame fastener having an open configuration with said latch members disengaged and a closed configuration with said latch members engaged.

The invention of claim 8 wherein said rings and longitudinal members comprise sheet metal.



In combination with an air handling system of a heating, ventilating and air conditioning system including a supply duct, a diffuser and a length of flexible duct interconnecting same and including an arcuate bend, the improvement of a sleeve assembly which comprises:

- a) a frame including:
 - 1) opposite first and second ends;

 inner rodius frame section, including an
 - an inner radius arc extending between said ends;
- 3) an outer radius arc extending between said ends;
 - 4) an arcuate longitudinal axis extending between said ends in generally parallel relation with respect to said arcs;
 - a plurality of annular rings, including a first end ring located adjacent to said frame first end, a second end ring located adjacent to said frame second end and an intermediate ring located between said end rings;
 - 6) each said ring lying generally in a plane perpendicular to said longitudinal axis;
 - each said ring comprising an inner rib of said inner radius frame section and an outer rib of said outer radius frame section;
 - 8) each said frame section including a pair of arcuate side edges; and
 - 9) a passage extending between and open at said ends, said passage receiving said flexible duct; and

a plurality of fastener subassemblies each mounted on said frame adjacent to said section side edges, each said fastener subassembly having an open position with said frame sections disengaged and a closed position with said frame sections engaged.

12. The invention of claim 18, which includes:

b)

- a) at least one of said end rings including a plurality of receivers; and
- a plurality of mounting screws each located in a respective ring receiver and adapted for fastening said sleeve assembly to said flexible duct and/or said diffuser.

The invention of claim 18, which includes:

- a) said sleeve assembly comprising an elbow-configuration sleeve assembly with the first end of the frame thereof fastened to said diffuser; and
- b) a straight configuration sleeve assembly with first and second frame ends, said first end being connected to said elbow-configuration sleeve assembly frame second end; and
- c) said sleeve assemblies receiving said flexible duct.

